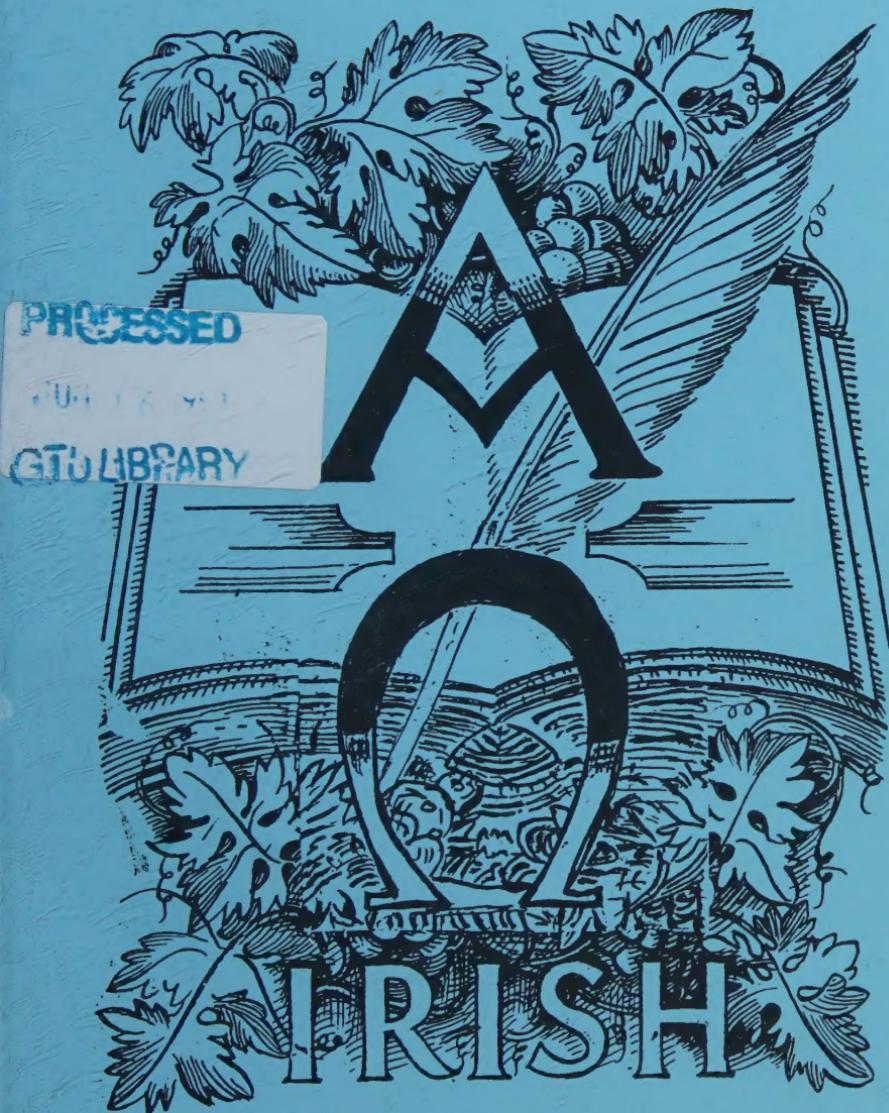


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CONTENTS

Earl S. Johnson, Jerusalem	Mark 5:1-20: The Other Side”	50-74
George K. Barr	Significant scale changes in the Gospels and Acts	75-91
Henry Innes MacAdam	Book Review Article	92-96

“MARK 5:1-20: THE OTHER SIDE”

Earl S. Johnson, Jr.

Although this passage is usually interpreted from the Jewish perspective of purity or the necessity to cast out pagan influences represented by the demons in the swine, an examination from the other side, i.e. the Roman side in Geresa and the Decapolis, indicates that Mark is also concerned about issues of commerce and Roman religious concepts of sacred space, death and atonement.

Mark 5:1-20 is one of the most unusual healing narratives in the New Testament and in spite of the considerable amount of recent research¹ which has attempted to unravel its secrets, scholars

¹ For summaries of previous studies see J. Craghan, “The Geresene Demoniac,” *CBQ* 30 (1968), 522, n 4; P. Lamarche, “Le Possédé de Géresa”, *NRT* 96(1968), 58; G. Swarz, “‘Aus der Gegend’ (Markus v.10b)”, *NTS* 22(1976), 214. More recent detailed examinations include those of J. Starobinski, “The Geresene Demoniac, A Literary Analysis of Mark 5:1-20”, *Structural Analysis And Biblical Exegesis, Interpretational Essays* (Pittsburgh: The Pickwick Press, 1974), 57-84; F.-J. Leenhardt, “An Exegetical Essay: Mark 5:1-20, ‘The Madman Reveals The Final Truth of Man’ (M. Foucault)”, *loc. cit.*, 85-109; F. Annen, *Heil für die Heiden, Zur Bedeutung und Geschichte der Tradition vom besseren Gerasener (Mk 5,1-20 parr)* (Frankfurt am Main: Josef Knecht, 1976); J. D. Derrett, “Contributions To The Study Of The Geresene Demoniac”, *JSNT* 3 (1979) 2-17; Paul W. Hollenbach, “Jesus, Demoniacs, and Public Authorities: A Socio-Historical Study”, *JAAR* 49(1981) 567-587; Z. Kato, *Die Völkermission im Markusevangelium, Eine redaktionsgeschichtliche Untersuchung* (Frankfurt am Main, N.Y.: Peter Lang, 1986); Carol Schersten LaHurd, “Biblical Narrative and Reader Response to Ritual in Narrative”, in *The Daemonic Imagination, Biblical Text And Secular Story*, edited by Robert Detweiler and William G. Doty, AAR Studies in Religion 60, (Atlanta: Scholars Press, 1990) 53-63; Carol Schersten LaHurd, “Reader Response to Ritual Elements in Mark 5:1-20”, *Biblical Theology Bulletin* 20 (1990), 154-160; Ken Frieden, “The Language of Demonic Possession: A Key-Word Analysis”, *The Daemonic*

still find themselves frustrated in the attempt to interpret its bizarre details and determine its significance within the structure of Mark's gospel.² Considering the waste of the herd of pigs and the extraordinary nature of the exorcism of a legion of demons, it is not surprising that the story of the Geresene demoniac has been variously described as "shocking"³, "stupendous" and "scandalous"⁴, even alleged to contain elements of the burlesque and absurd.⁵ On occasion it has been suggested that the narrative

Imagination, 41-52; Mark McVann, "Destroying Death: Jesus in Mark and Joseph in "The Sin Eater" ", in *The Daemonic Imagination*, 123-35; Gordon Franz, "The Demoniac(s) of Gadara: Mark 5:1-20", [microform], *Evangelical Theological Society Papers* (1991), 1-11; Helmut Merklein, "Die Heilung des Besessenen von Gerasa (Mk 5, 1-20), Ein Fallbeispiel für die tiefenpsychologische Deutung E. Drewermanns und die historisch-kritische Exegese", *The Four Gospels*, 1992, *Festscript Frans Neirynck*, vol II, (Leuven: Leuven University Press, 1992) 1017-1037; Thomas Schmeller, "Jesus im Umland Galiläas, Zu den markinischen Berichten vom Aufenthalt Jesu in den Gebieten von Tyros, Caesarea Philippi und der Dekapolis", *BZ* 38 (1994) 44-66; J.L.P. Wolmarans, "Who Asked Jesus To Leave The Territory of Geresa (Mark 5:17)?", *Neotestamentica* 28 (1994) 87-92; Erik K. Wefald, "The Separate Gentile Mission in Mark, A Narrative Explanation of Markan Geography, The Two Feeding Accounts and Exorcisms", *JSNT* 60 (1995) 3-26; Ze'ev Safrai, "Gergesa, Gerasa, or Gadara? Where Did Jesus' Miracle Occur?", *Jerusalem Perspective* 51 (1996) 16-19. Recent commentaries with detailed examinations include Robert A. Guelich, *Mark 1:-8:26*, Word Biblical Commentary 34A, (Dallas: Word Books, 1989); Robert Gundry, *Mark, A Commentary On His Apology For The Cross*, (Grand Rapids: Eerdmans, 1993).

² See, for example, the analysis of F. G. Lang who thinks it is Christologically significant ("Kompositionsanalyse des Markusevangeliums," *ZThK* 74[1977],1-24).

³ H. Sahlin, "Die Perikope vom gerasenischen Besessenen und der Plan des Markusevangeliums", *ST* 18(1964) 159.

⁴ R. Pesch, "The Markan Version Of The Healing Of The Geresene Demoniac", *Ecumenical Review*, 23(1971), 349. See also his "Der Besessene vom Geresa, Entstehung und Überlieferung einer Wundergeschichte" (Stuttgart: KBW Verlag, 1971) as well as *Das Markusevangelium*, I (Freiburg: Herder,1977).

would be more credible if the reference to the swine was eliminated altogether as a superfluous and secondary detail.⁶

One factor which has often been overlooked is that even though the narrative clearly takes place in Gentile territory, in the region of the Geresenes in the Decapolis, the pericope, generally speaking, has only been examined from the Jewish side of the lake. Since Jesus and the disciples are moving from west to east (4:35; 5:1-2) and return in the next passage (5:21-22) to an encounter with a leader of the synagogue, the passage has usually been interpreted in light of the Jewish abhorrence of unclean swine, the biblical and talmudic understanding of exorcism and demonology⁷ and the multiplicity and demonic nature of Gentile divinities. More currently, it has played a role in the renewed interest in the discussion of Mark's understanding of the distinction between the Jewish and Gentile areas into which Jesus traveled and the origin of mission in Gentile regions.⁸

In recent study it has been demonstrated that important Markan themes can be fruitfully understood not only from Judaic and Judeo-Christian perspectives but also in light of Greco-Roman thought patterns and culture.⁹ Since it is generally acknowledged

⁵ D. Lührmann, *Das Markusevangelium* (Tübingen: J.C.B. Mohr [Paul Siebeck], 1987) 98-99.

⁶ Pesch, for example, sees it as detail that came into the story later and he agrees with those who consider it to be an afterthought (*ER*, 368).

⁷ See Derrett, for example, who explains the passage in light of Old Testament and haggadic traditions about the Exodus, Moses, David, Isaiah and Nahum (3-17).

⁸ See H. Anderson, *The Gospel Of Mark*, (London: Oliphants, 1976), 150; E.S. Malbon, "Galilee And Jerusalem: History And Literature In Markan Interpretation", *CBQ* 44(1982) 242-255; for the history of this discussion. For more recent examination of the question from varying perspectives see Pesch, *ER* 373; Annen, 51ff; 85-90 and Kato, 44-63, 188-197; Wefald, 3-26; Gundry, 265-266. Gundry argues convincingly that Mark's emphasis is Christological rather than anti-Judaistic or Gentile-evangelistic.

⁹ See especially V.K. Robbins, *Jesus The Teacher, A Socio-Rhetorical Interpretation Of Mark* (Philadelphia: Fortress, 1984); also my "Is Mark 15:39 The Key To Mark's Christology?", *JSNT* 31(1987) 3-22.

that Mark's gospel is written to Christians living outside of Palestine in a Gentile area of the Roman Empire, possibly to believers living in Rome itself¹⁰, it is not unlikely that Mark also composes the miracle narratives with the religious and cultural world in which his readers live in mind as well.¹¹

The review of a few studies suggests possible connections between Mark's gospel and its Roman environment.

1. Paul Hollenbach argues, for example, that the demoniac's mental illness is to be seen as a socially acceptable protest, or escape from, the social and political oppression of the Roman Empire. The demoniac represents the oppressed lower class in Roman society in opposition to the powerful elite. Demon possession provides an "oblique aggressive strategy" which is able to identify Roman legions with the destruction of the swine who

¹⁰ V. Taylor reviews various theories about the gospel's connection with Rome (*The Gospel According To Mark* [2nd edn: London: Macmillan, St. Martins, 1967] 32). A more recent examination is found in M. Hengel, *Studies In The Gospel Of Mark* (Philadelphia: Fortress, 1985); D. Senior, "With Swords And Clubs...-The Setting Of Mark's Community And His Critique Of Abuse Of Power", *Biblical Theology Bulletin* 17(1987) 10-20; E. Earle Ellis, "The Date and Provenance of Mark's Gospel", *The Four Gospels, Festschrift Frans Neirynck*, 1992, II, 801-815. Anderson gives the evidence for a provenance more generally in the Roman Empire (20-29); also see Wefald, p. 7. Other suggested areas include Galilee (W. Marxsen, *Der Evangelist Markus* [Göttingen: Vandenhoeck & Ruprecht, 1956, 1959]) and Antioch (H.C. Kee, *Community Of The New Age* [Philadelphia: Westminster, 1977]); Burton Mack, *A Myth of Innocence, Mark and Christian Origins* (Philadelphia: Fortress, 1988). For a summary of recent discussions see John R. Donahue, "The Community of Mark's Gospel", *The Four Gospels*, II, 816-838.

¹¹ This likelihood is raised in 5:7 since the man's acclamation of Jesus is a Gentile formulation. C.E.B. Cranfield points out that the expression is used by non-Israelites in the Old Testament (*The Gospel According To St. Mark* [London: Cambridge University Press, 1959] 177). For references to its use in inscriptions to Greco-Roman gods see G.H.R. Horsley, *New Documents Illustrating Early Christianity* (Macquarie University: Ancient History Documentary Research Centre, 1981) I, 25-29.

plunge over the cliff. By interpreting and practicing exorcisms in an unique way, Jesus challenges both the Roman authorities and the Pharisees and presents a countercultural move which was considered a threat to the power and culture of both societies.¹²

2. Ched Meyers points out that Mk 5:1-20 is filled with military imagery which is meant to call to mind the Roman military occupation of Palestine. The demon represents Roman military power and in him Jesus encounters "the other half" of colonial condominium. The destruction of the swine indicates the initial breach of Roman's symbolic domination and Jesus' inaugural challenge to the powers.¹³

3. In a more recent study, J.L.P. Wolmarans contends that owners of the pigs are involved in the commercial raising of swine on a large scale to supply the Roman army with pork.¹⁴ Although Wolmaran's argument that the herdsmen who fled (5:14) are slaves who must now be disciplined under a code which determines the punishment for those who have been irresponsible with a master's property is not substantiated in the Markan text, he does highlight an important aspect of the commercial and social value of the pigs in a Roman colonial setting. A study by Ramsay MacMullen indicates that from the middle of the first century soldiers attached to occupied areas did their own farming, growing fodder for their horses or buying hay from contractors.¹⁵ Tacitus relates that some fields were left empty for the usage of soldiers and that they also kept herds (*Ann.* 13.54-55). *Pecuarii* had contracts with municipal magistrates to sell meat in camp markets and the magistrates supervised pastures, sheds, flocks, herds and herdsman engaged in these commercial ventures. MacMullen is unsure, however, about the precise chronological development of these activities, noting

¹² "Jesus, Demoniacs, and Public Authorities: A Socio-Historical Study", *JAAR* 49(1981) 567-587.

¹³ *Binding the Strong Man, A Political Reading of Mark's Story of Jesus* (Maryknoll, NY: Orbis 1991).

¹⁴ J.L.P. Wolmarans, "Who Asked Jesus To Leave The Territory of Geresa (Mark 5:17)?", *Neotestamentica* 28 (1994) 87-92.

¹⁵ Ramsay MacMullen, *Soldier And Civilian In The Later Roman Empire* (Cambridge: Harvard University Press, 1967) 9-10.

that although they were practiced in the first century, the most concrete evidence comes from Severan times and later.

A re-examination of Mark's introductory and concluding insertions, Jesus' unusual interaction with the legion of demons and the pervasive Roman religious imagery in 5:1-20 indicates the continuing value of examining this pericope from the Roman side of the lake and indicates that in addition to military and commercial imagery which illuminates the perspective of Mark's Roman readers, religious and sacrificial evidence indicates how the story of demoniac reflects Mark's concern with his readers' understanding of Roman attitudes toward purity, death and atonement.

I. REDACTIONAL CLUES AND NARRATIVE LOCATION

Although it is generally agreed that Mark has retained the story of the Geresene demoniac largely as he finds it in the tradition, the clearest signs of his redaction are found in v. 1 *a, b* and v. 20¹⁶ where Mark indicates that the incident occurs in Gentile territory.¹⁷ As Bultmann points out, Mark's redaction is evident in the abrupt shift from plural (v. 1) to singular (v. 2) as he includes the disciples in a story which originally only pertained to Jesus.¹⁸ The expression *εἰς τὸ πέραν*, furthermore, occurs in Markan descriptive passages (3:8) and is particularly prominent in transitions where Mark introduces Jesus' movement by boat and

¹⁶ R. Bultmann, *The History Of The Synoptic Tradition*, (Oxford: Basil Blackwell, 1968) 210. See the convenient summary of the conclusions of several redaction critics by F. Neirynck, "The Redactional Text Of Mark," *ETL* 57(1981) 144-162; also Lührmann, 99; William R. Telford, "The Pre-Markan Tradition in Recent Research", *The Four Gospels*, II, 694-723. Most scholars also agree that v. 8 is a Markan insertion: Bultmann, 210; K. Kertelge, *Die Wunder Jesu im Markusevangelium, Eine redaktionsgeschichtliche Untersuchung* (München: Kosel-Verlag, 1970) 102; C.S. Mann, *Mark, A New Translation With Introduction And Commentary* (Garden City, N.Y.: Doubleday and Co., Inc., 1986) 279; Lührmann, 99. Some scholars attribute 2*a*, 9*c*, and parts of 18 and 19 to Mark as well. See Neirynck, 144-162.

¹⁷ See the discussion below.

¹⁸ Bultmann, 344.

the special revelation he gives on these occasions (4:35; 6:45; 8:13).

In v. 20 the use of the auxiliary verb ἤρξατο, κηρύσσω (began, preach) in reference to the proclamation of the word about Jesus, and the amazement of the bystanders connected with unbelief and fear (1:27; 6:6; 10:24,32; 15:5,44), all indicate that the whole verse is a Markan construction and that Mark is responsible for locating the miracle in the region of the Decapolis.¹⁹ Although it has been argued that the passage was already connected to 4:35-41 before Mark received it²⁰, the presence of a carefully constructed introduction and conclusion suggest that Mark himself has brought the passages together for the first time and that he may also be responsible for locating the miracle in the region around Geresa as well.²¹

Mark's placement of the story in this location has often puzzled later interpreters²², of course, and has been thought to create a severe strain in the narrative credibility of his account. Clearly it was a source of embarrassment to Matthew and Luke and later editors of synoptic texts since Mark has Jesus crossing the sea only to land some 55km southeast of its terminus. Changes in the text which locate Jesus closer to the sea in Gadara (Matt 8:28 and later Markan texts which imitate it)²³ or directly on the eastern

¹⁹ For the Markan nature of ἤρξατο and κηρύσσω see Taylor, 48.

²⁰ P. J. Achtemeier, "Toward The Isolation Of Pre-Markan Miracle Catena," *JBL* 89 (1970) 265-291.

²¹ Scholars differ on this point. Kertelge, 101-102; Pesch *ER*, 368; Kato, 45 think that reference in 5:1 was already in the pre-Markan tradition. Annan argues that Geresa was in the tradition and that Mark has designated a more general area because he has no interest in that specific city (197). Merklein, 1024-26, argues that 5:1-20 is the product of a long growth process in narrative tradition. See further discussion below.

²² Attempts have been made to distinguish different levels of pre-Markan tradition. See especially Cragan, 522-536; Pesch *ER* 349-376; Anderson, 145-151; Annen, 182-197; Kato, 44-63. As Lührmann points out, such studies yield tentative results and are often of limited value for understanding Mark's own interpretation (99).

²³ Located in Umm Qeis in Jordan, the ruins of black basalt Gadara have a number of tombs on the outskirts, especially on the main road

shore in Gennesaret²⁴ remove the incongruity but do not resolve the difficulty in Mark's gospel since εἰς τὴν χώραν τῶν Γερασηνῶν²⁵ remains the *lectio difficilior* and the preferred text.²⁶

Because Mark's reading provides yet another problem in a pericope already laden with insuperable difficulties, his reference to Geresa is often dismissed as theologically insignificant or merely another example of the confused nature of Jesus' itinerary around the Sea of Galilee and Mark's apparent lack of knowledge of the

leading into the modest tourist center, near one of the theaters. Gordan Franz thinks it may represent the historic location of the miracle. Even though it is 10km south east of the lake, it may have been connected with the recently discovered harbor south of Tel Samra, "The Demonic(s) of Gadara: Mark 5:1-20", [microform], *Evangelical Theological Society Papers* (1991), 1-11. See Iain Browning, *Jerash And The Decapolis* (London:Chato & Windus, 1982) 42-46, for a discussion of archaeological activity there.

²⁴ Geographically Kursi (Gergesa) is the most logical site for the miracle's location. Situated just north of Kibbutz En Gev, with a commanding view of the lake from the east, a gentle slope leads to the shore about 1km away. One might suppose that the waterline has receded over the centuries, thus eliminating the necessity of a jump of super-Olympic proportion for the story's swine. The site is surrounded by several ancient tombs but they are not easily reached by the casual tourist at this time because of the danger of land mines remaining from the 1967 war. See Gundry, p. 256, for a detailed discussion about the archaeological evidence concerning the site.

²⁵ Modern Jerash is one of the most handsome archaeological sites in either Jordan or Israel. It is accessible from Israel but tour groups wishing to visit the area must currently make arrangements with Jordanian authorities to secure Jordanian guides and tour buses. Tombs excavated to date span the period from the first century to the sixth century, and are especially notable near the North-west Gate, the foundations before Hadrian's Arch, on both sides of the Church of Bishop Marianus and in the South-west Cemetery. See Rami Khouri, *Jerash, A Frontier City Of the Roman East* (London & NY: Longman, 1986) 51-52.

²⁶ So Pesch, *ER*, 353. This reading is usually the accepted one; Taylor, 278; Cranfield, 176. See Gundry's detailed study of the possible reasons why Geresa is Mark's choice of location, p. 256.

topography of that area.²⁷ The study by O.A.W. Dilke demonstrates, however, that it was not unusual for writers of the first centuries B.C. and A.D. to make cartographical errors, even those who considered themselves to be historians and geographers.²⁸ Ptolemy, for example, criticizes Marinus for incorrectly locating certain places opposite others in his discussion of the Mediterranean coast.²⁹ As Dilke points out, furthermore, ancient writers were often interested in more than the exact coordinates of places. Even if the location of an area or city was not precisely known, an author could still attribute great prominence to it because it could be connected in his mind with information of more significant value to his readers, data about the aetiology of gods and goddesses, the background of various myths and symbols, the movement and success of conquering armies or a simple fascination with the horrific and bizarre. In the case of Mark 5:1-20, an examination of the history of Geresa suggests that its background as a Roman city and its consequence for Mark's Roman readers is more significant to Mark than its precise location vis-à-vis the Sea of Galilee.

II. GERESA, ROMAN CITY OF THE DECAPOLIS

Geresa, by the time Mark wrote, was clearly identified as a Roman city in a Roman province. After the invasion of Pompey in 63 B.C., the Decapolis had ceased to be a loose confederation of

²⁷ See Pesch, *ER*, 352. Mark's confusing geographical references in the first eight chapters are discussed in my study "Mark VIII.22-26: The Blind Man From Bethsaida", *NTS* 25(1979) 372. Also see D.-A. Koch, "Inhaltliche Gliederung und geographischer Aufriß im Markusevangelium," *NTS* 29(1983) 150-152; E.S. Malbon, "The Jesus Of Mark And The Sea Of Galilee", *JBL* 103(1984) 368,372; and in *Narrative Space and Mythic Meaning In Mark* (San Francisco:Harper & Row, 1986) 27ff.

²⁸ *Greek And Roman Maps* (Ithaca: Cornell University Press, 1985). Dilke particularly points out the errors made by Polybius, Strabo, Pomponius Mela, Marinus of Tyre, Pliny the Elder and Ptolemy (60-69). Also see J.O. Thompson, *History Of Ancient Geography* (N.Y.:Biblo and Tannen, 1965) 169-350.

²⁹ Dilke, 74.

Greek cities but was reorganized into the Roman province of Syria and its urban areas were used for the quartering of Roman troops.³⁰ Josephus mentions that the city was one of those brutally attacked by the Jews as a reprisal for Roman slaughter in Caesarea (*J.W.* 2.458-459). Later, he points out that the citizens refused to maltreat Jews who remained with them and agreed to escort them back to Jewish territory (2.480). Although Mark somewhat loosely identifies the place of Jesus' arrival as the area of the Geresenes, his readers would have understood that the exorcism was performed directly outside of the city limits of Geresa itself since the Romans routinely located necropoles on the outskirts of urban boundaries, ranged along the major routes which led into populated areas.³¹ As G. Lankester Harding points out, Geresa (also known as Jerash or Jarash) underwent a rebuilding program in the first century A.D. and it is this city that Mark's readers would have in mind as the story about the Geresene demoniac is told. As Harding

³⁰ Lührmann, 101; Malbon points out that the presence of the pigs alone indicates that the story takes place in Gentile territory (*JBL* [1984] 372). Contra Marxsen, 42, and Koch, 153, who argue that Mark does not distinguish between Gentile and Jewish areas around the Sea of Galilee. J. A. Overman indicates how powerful Roman influence was in Galilee as well ("Who Were The First Urban Christians? Urbanization In Galilee In The First Century", *SBL Seminar Papers* [1988]) 160-168). For general information on the Decapolis see G. A. Smith, *The Historical Geography Of The Holy Land* (London: Hodder and Stoughton, 1898), 594-608; D.C. Pellett, *Interpreter's Dictionary Of The Bible* (N.Y., Nashville: Abingdon Press, 1962), I, 810-812; *Princeton Encyclopedia Of Classical Sites* (Princeton: Princeton University Press, 1976) 348-349. The Greek and Latin texts which refer to Decapolis are provided by A. Spijkerman, *The Coins Of The Decapolis And Provincia Arabia* (Jerusalem: Franciscan Printing Press) 1978.

³¹ See M. Brion, *Pompeii And Herculaneum, The Glory And The Grief*, (N.Y.: Crown Publishers, Inc., 1960) 160; J.M.C. Toynbee, *Death And Burial In The Ancient World* (Ithaca: Cornell University Press, 1971) 73; K. Hopkins, *Death And Renewal, Sociological Studies In Roman History* (Cambridge: Cambridge University Press, 1983) II, 205; R. Jones, "Burial Customs Of Rome And The Provinces", *The Roman World*, ed J. Wacher (London and N.Y.: Routledge and Keegan Paul, 1987) 813.

describes it, Geresa was a “typical Roman provincial town”, no doubt planned and designed as a unit by a Roman architect and carried out by a Roman supervisor.³² An inscription in the northwest gate indicates that the town wall was completed in 75-76 A.D. although a new temple to Zeus was begun in 22-23 A.D. and was still under construction when Mark wrote the gospel. New streets were laid out a little later between 39-76 A.D. Rostovtzeff's aside about the uniqueness of Geresa clearly indicates the scene which Mark creates.

In Jerash, as in all cities of the ancient world, a second and no less imposing town arises immediately behind the town of the living: this is the town of the dead full of remarkable monuments. There is no point in describing them here, for they are neither as strange nor as beautiful as those of Petra or Palmyra, yet the town would seem incomplete without them, for they were buildings first encountered by a traveler coming from Damascus or Palestine, Philadelphia or Bosra, or from other cities of the Decapolis. The temples and chapels, the huge massive sarcophagi, the step-pyramids set upon heavy bases, the facades cut in the rocks--all appear in fantastic sequence, and it was probably they that prepared the visitors for the splendors of the town of the living.³³

³² G. Lankester Harding, *The Antiquities Of Jordan* (N.Y., Washington: Frederick A. Praeger, Publishers, 1959, 1969) 79,85. Also see “Geresa”, *Harper’s Bible Dictionary* (San Francisco: Harper and Row, 1985) 340.

³³ M. Rostovtzeff, *Caravan Cities*, trans D. and T. T. Rice (Oxford: At The Clarendon Press, 1932). Admittedly some of the monuments he describes postdate Mark’s gospel. Yet, it can be assumed that the necropolis of Jerash had been substantially built up soon after Pompey’s invasion in 63 B.C. See Gundry, 256, for a discussion of the discovery of tombs in Jerash.

II. LEGION AND THE ROMAN TOMBS

An appreciation of the way in which Mark's readers would have understood the exorcism of the demoniac in Geresa casts further light on the more bizarre and troubling features of the narrative, i.e. Jesus' encounter with a legion of demons and the casting of the unclean spirits into the herd which is instantly destroyed. Generally it is assumed that the word legion refers to the large number of demons involved, a Roman legion usually consisting of around 6,000 men.³⁴ Jesus' exorcism, it is argued, can demonstrate his unusually great power since he is able to defeat such an extraordinary army of unclean spirits.³⁵ While such an interpretation cannot be denied, the setting of the story suggests that it also makes a statement about Roman religion and the relationship between the Christian faith and Roman practices which would have been familiar to Mark's readers.

This conclusion is reached not simply because the word legion occurs in v. 9 but because Mark's readers would have been aware of the fact that a necropolis in a Roman city or town would be filled with the monuments and tombs of Roman soldiers, and that surrounded by the reminder of the presence of Roman military might and religious beliefs, the word legion would naturally describe the theological setting of the pericope. In his detailed study of the practice of Roman soldiers to memorialize themselves, particularly in provincial areas in which they last served, Richard Duncan-Jones demonstrates that it was common, especially for

³⁴ See Anderson, 146; Pesch, *ER*, 363. Derrett points to several words which have "a military undersense" (5). Whether or not Mark's account could have been influenced by the fact that the Tenth Roman Legion (its symbol was a wild boar) was stationed near Gerasa from 70-135 CE depends upon the date assigned to the gospel's writing. See Gundry, 260.

³⁵ For the significance of the number of demons see O. Böcher, *Dämonenfurcht und Dämonenabwehr, Ein Beitrag zur Vorgeschichte der christlichen Taufe* (Stuttgart: W. Kohlhammer, 1970) 107-116. It also demonstrates that since Jesus is able to learn their name, he has authority to cast them out, Mann, 279.

centurions and officers of a higher rank, to pay exceptional amounts of money for statues, tombs and funerary monuments in their own honor, often spending many times more than their annual salary or the funeral grants given by a grateful city or a burial society to which they subscribed.³⁶ Expenditures of such exorbitant nature were not made for ostentation alone³⁷ but reflected the Roman view that the necropolis or "house of the dead" was where eternity was to be spent and that a person without a suitable tomb was doomed to wander as a shade without rest or peace.³⁸ As Trimalchio says of his monument in Petronius' romance (*Sat* 71), "It is quite wrong for a man to decorate his house while he is alive, and not to trouble about the house where he must make a longer stay."³⁹

A Roman necropolis was not a quiet English country setting and what has been assumed to be an exaggerated portrait of hectic confusion in Mk 5:1-20 by modern readers would not have seemed abnormal to the Gentile members of Mark's church. Not only was a Roman city of the dead located directly in the outskirts of populated areas, it was also placed at the junction of major thoroughfares. The location of the cemetery was important because it was expected to be inhabited by the living as well as the dead, it being the solemn duty of the relatives and friends to care for the well being and honor of deceased ancestors. The dead were often supplied with objects which could be used in the afterlife and tubes were inserted into the tombs into which food could be regularly

³⁶ R. D. Jones, *The Economy Of The Roman Empire* (Cambridge: Cambridge University Press, 1977, 2nd ed 1982) 78-171. Money was taken out of soldiers' salaries to pay for the funeral expenses of comrades who fell in service. See Toynbee, 55.

³⁷ Hopkins describes the way in which Roman funeral processions drew attention to family status and honors, 201-202. Cicero complains about the extravagance of the monument of Gaius Figulus, commenting that it was not what Roman ancestors desired and was out of keeping with tradition (*De leg.* 2.25). See n. 49 below.

³⁸ So F. Cumont, *After Life In Roman Paganism* (N.Y.: Dover Publications, Inc., 1922, 2nd ed 1959) 48.

³⁹ Cited by Cumont, 49.

poured. Funeral banquets were held at the time of death and sacramental meals were observed later to help the deceased along the way in the afterlife.⁴⁰ The necropolis was set near to a city so that people could go in and out quickly (as is implied in Mark 5:14,17,20) and frequently there were gardens and vineyards attached to the area to supply fruit and wine for libations.⁴¹ Considering the number of people and the amount of food which would normally go in and out of a Roman city of the dead it would not be difficult for Mark's readers to visualize the scene which Mark 5:1-20 draws. Keith Hopkin's description of the activity at a Roman necropolis portrays the kind of hubbub which is assumed to lie behind Mark's narrative. Speaking of the major Roman religious festivals for the dead such as the *Parentalia* and the *Lemuria*, Hopkins notes that

During these festivals, the law-courts and temples were closed, and no public business was done, and special rituals were performed in honor of the dead (Ovid, *Fasti*, 2.533ff. 5.4119ff.). At the *Parentalia* and on other days, relatives traditionally visited the graves of their kin and had a meal at the grave-side. Collective graves...were often provided with adjacent banqueting rooms; elaborate private tombs often had a special area designed for feasting; in the graveyards at Pompeii and Ostia, for example, there are modest family tombs with private courtyards, equipped with stone dining benches, an oven with a well. We have to imagine Roman families picnicking *al fresco* at the family tomb,.... Sometimes, the dead were thought of as being present at these feasts.⁴²

⁴⁰ Cumont, 53ff.; 199; J. Ferguson, *The Religions Of The Roman Empire* (Ithaca: Cornell University Press, 1970) 134ff; Hopkins, 41, 233.

⁴¹ Toynbee, 94-98. See Petronius, *Sat* 71.

⁴² Hopkins, 233.

Since Romans celebrated the birthday of the deceased and often brought flowers, lamps and incense to the tomb on a regular basis, it is not impossible to assume that Roman cemeteries were constantly busy and filled with mourners and worshippers.⁴³

III. SWINE AND ROMAN SACRIFICE

Throughout the history of interpretation of the story of the Geresene demoniac attention has understandably been focused on the exorcism of the demons and their destruction in the herd of pigs and both details have been considered key elements in the narrative. Generally the swine have been understood exclusively as a negative symbol in light of the Jewish abhorrence of ritually unclean animals and the prohibition of eating or sacrificing pigs (Lev 11:7; Deut 14:8; Is 65:2-4; 66:3,17; 1 Macc 1:47).⁴⁴ Frequently it has been assumed that the pigs represent pagan irreligious behavior⁴⁵, heathen worship of the demonic or the destructive presence of Rome⁴⁶, frightening aspects which can all be annihilated by the powerful intervention of Jesus. Viewed from the other side, as a critical element in Roman religious practice,

⁴³ See Hopkins, 233-235. Evidence exists to demonstrate that Romans and Christians continued to build tombs and sarcophagi well into the 4th and 5th centuries. For photographs see R.S.O. Tomlin, "The Army Of The Late Empire", *The Roman World*, I, 128, pl. 7.11.

For general studies of Roman burial practices both in the provinces and Italy consult R. Jones, "A Quantitative Approach To Roman Burial", *Burial In The Roman World*, ed R. Reese (London: Council For British Archaeology, 1977) 20-25; G. Davies, "Burial In Italy Up To Augustus", *op. cit.*, 13-19. Also see references to the discoveries in the necropoles in Pompeii and Herculaneum, Brion, 160-173 and the photo on 43, pl. 7.

⁴⁴ For studies of Old Testament and talmudic concern about pigs as unclean see E. Wiesenbergs, "Related Prohibitions: Swine Breeding And The Study Of Greek", *Hebrew Union College Annual*, 27(1956) 213-233; Cragan, 529; Pesch, *ER*, 361; Derrett, 12ff.; Annen, 168-181; Kato, 52-53.

⁴⁵ See, for example, Cragan, 532ff.; Pesch, *ER*, 361; Annen, 184ff.

⁴⁶ In talmudic literature the pig is a symbol of Rome itself, see Wiesenbergs, 221.

however, the pigs assume a much different role and point to a more positive significance for Mark and his Gentile readers.

Studies of Roman sacrificial practices demonstrate, for example, that pigs played a prominent role in Roman religious practice from the early days of the Republic.⁴⁷ Rather than being considered unclean or demonic they were a necessary part of true piety, and were customary sacrificial animals in Rome.⁴⁸ According to Ovid, Ceres was the first divinity in the Roman pantheon to demand the sacrifice of swine (at games in her honor), presumably because the goddess has learned that they routed up growing grain with their snouts in the spring (*Fasti* 1.349).⁴⁹ In his play *The Menaechmi* (written ca. 275-270 B.C.), Plautus presents a comic dialogue between two characters in which Menaechmus thinks that the slave cook Cylindrus is a madman (282). Because he assumes mistakenly that the cook is insane he asks him where he can quickly purchase some sound pigs for sacrifice (288) because he wants to purify the domestic at his own expense (*iube te piari de mea pecunia*). Cylindrus cheekily replies that if Menaechus does not recognize him he should take the money and get a porker for himself (313)! Although Plautus is clearly lampooning practices which he considers pretentious and superstitious, his description involves rituals which must have been common enough for theatergoers to recognize and ridicule.

A few years later (ca. 234-149 B.C.), Cato mentions in *De Agri Cultura* that pigs were used in a number of sacrificial offices. He speaks particularly of the *porca praecidanea* (134) which was a

⁴⁷ For general studies of the place of pigs as sacrificial animals in Roman religion and other cultures see B. Brentjes, "Das Schwein als Haustier des alten Orients", *EAZ* 3(1962) 125-138; F. J. Stendebach, "Das Schweinopfer im alten Orient", *BZ* 18(1974), 263-271; Annen, 164-165.

⁴⁸ See R. Lewinsohn, *Animals, Men And Myths* (N.Y.: Harper And Brothers, 1954) 101; J.M.C. Toynbee, *Animals In Roman Life And Art* (Ithaca: Cornell University Press, 1973) 134; H.H. Scullard, *Festivals And Ceremonies Of The Roman Republic* (Ithaca: Cornell University Press, 1981) 23.

⁴⁹ Citations from Latin literature are from the Loeb Classical Library unless otherwise indicated.

sacrifice before the harvest when the entrails of the victim were removed and the pig was offered along with cakes and prayers to Janus and Jupiter. The entrails were then presented with a libation to Ceres. Cato also describes the Roman formula to be observed in thinning a grove (139).

A pig is to be sacrificed (*porco piaculo facito*), and the following prayer uttered:

'Whether thou be a god or goddess to whom this grove is dedicated, as it is thy right to receive a sacrifice of a pig for the thinning of this sacred grove, and to this intent, whether I or one at my bidding do it, may it be rightly done. To this end, in offering this pig to thee, I humbly beg that thou wilt be gracious and merciful to me, to my house and household, and to my children. Wilt thou deign to receive this pig which I offer to this end?

Cato further mentions (160) that pigs were also to be offered at the time of the tilling of the ground and illustrates how many would be needed for all of these activities. "So long as the work continues, the ritual must be performed in some part of the land every day; and if you miss a day, or if public or domestic feast days intervene, a new offering must be made."

Of particular interest is Cato's description (161) of a better known sacrifice for purifying the land, the *suovetaurilia*, which incorporated the offering of a pig (*sus*), ram (*ovis*) and a bull (*taurus*)⁵⁰ to Mars as a god of agriculture as well as a god of war. Again appealing for mercy in language reminiscent of Mark 5:19, suppliants prayed to Father Mars saying, "I pray and beseech thee that thou be gracious and merciful to me, my house, and my household." Cato says that the sacrifice was also performed with suckling animals to prevent sickness seen and unseen, barrenness

⁵⁰ Compare the famous carving of this sacrifice on the altar of Cn. Domitius Ahenobarus in Scullard, pl. 1; also in *The Roman World*, I, pl. 30.1, 761.

and destruction, ruin, unseasonable influence, to permit harvests, grain, vineyards, plantations and flocks to flourish. When the moment came for the offering to be given the formula used was "To this intent deign to accept the offering of these victims." Cato mentions that if favorable omens were not obtained a second pig, along with a prayer of atonement, was to be given. "Father Mars, if aught hast not pleased thee in the offering of these sucklings, I make atonement with these victims." And if there was still doubt a final offering and supplication should be used, "Father Mars, inasmuch as thou wast not pleased by the offering of that pig, I make atonement with this pig (*te hoc porco piaculo*)."⁵¹

The practice of the *suovetaurilia* continued into the Christian era, long after Mark's gospel was written. Suetonius mentions the fact that it was given as an offering of purification (*lustrum*) every five years by the censors and was presented by Augustus (*Augustus* 2.97.1) and Tiberius (*Tiberius*, 21.1). A carving left by the *legio II Augusta* has been found on the Antonine wall in Britain⁵² which shows a Roman soldier on a horse bearing down on a group of barbarians in one panel and a depiction of a celebration of the victory through the sacrifice of a pig, sheep and bull, in another.

According to Terentius Varro (ca. 116-27 B.C.), *Rerum Rusticarum*, the very origin of sacrificial religion can be specifically traced to the offering of a pig (2.4 9). Although his etymology may be questionable, his comments no doubt reflect common sentiment when he writes, "The Greek name for the pig is ὄας, once called θύας from the verb θύειν, that is 'to sacrifice'; for it seems that at the beginning of making sacrifices they first took the victim from the swine family." He specifically mentions the sacrifice of swine to Ceres, their offering at rites to initiate peace, when a treaty is made and at the beginning of marriage ceremonies

⁵¹ For discussions of Cato's account see W. W. Fowler, *The Religious Experience Of The Roman People, From The Earliest Times To The Age Of Augustus* (London: Macmillan & Co., Ltd., 1911) 82, 212; H.J. Rose, *Ancient Roman Religion* (London: Cheltenham Press, Ltd., 1948) 62; Scullard, 17-18; 124.

⁵² *The Roman World*, I, pl. 9.7, 221.

of ancient kings. Piglets, he says, are weaned on the tenth day because they are considered “pure” at the time, called *sacres*, then they are first fit for sacrifice (2.4.16).

Varro gives careful advice about the raising of pigs (*porculatio*), weaning, the construction of a proper sty, feeding, how they are trained to come to the sound of a horn, and the normal size of a farmer’s herd (100-150 pigs, 300 being extraordinarily large, 2.4.19-22). As an aside, he mentions that religious statues of pigs were common in his day: “There are bronze images of them standing in public places even now, and the body of the sow is exhibited by the priests, having been kept in brine, according to the account” (2.4.18).

Of particular interest for the proper understanding of Mark 5:1-20 is the fact that swine were especially used in Roman religion for sacrifice during a funeral, at a gravesite or a necropolis. As J.M.C. Toynbee writes, “Various statutory regulations had to be complied with on all occasions of death and burial. Only when a pig had been sacrificed was a grave legally a grave.”⁵³ H.J. Rose points out, furthermore, that a grave was in a sense consecrated ground, it was *religiosus*, more or less taboo, and certain rites, including the sacrifice of a pig, were proper in preparing it.⁵⁴

According to Cicero (*De leg.* 2.22.55) the sacrifice of a pig was so common at the gravesite that it was unnecessary to explain when a period of family mourning should end, what the rules were in regard to the obligation to sacrifice a sow, or when the grave first takes on the character of a grave or comes under the protection of religion. Nevertheless, he writes further on (2.22.57), “Yet their places of burial do not become graves until the proper rites are performed and the pig is slain.” In a third text Cicero goes on to advise that a family was not held in defilement when a man died at sea and had his body thrown overboard. Yet the sow (its sacrifice) was required of his heir, a holiday of three days had to be kept and expiation made by sacrificing the sow (2.22.57).

⁵³ *Death And Burial In The Ancient World*, 50.

⁵⁴ Rose, 47. Horace indicates that dead ancestors (*Lares*) can be propitiated by sacrifices which include sucking-pigs, *Odes* 3.23. A boar may also be offered to Diana for young mothers, 3.22.

At the beginning of the section in which this information is provided Cicero makes it clear that there was nothing unclean or irreligious about Roman porcine sacrifice. Instead it was an act of pure religious devotion and commitment to the gods. "Now graves are objects of so much religious veneration that it is considered sinful to bury in them corpses not belonging to the clan or participating in its rites;...." "This whole body of pontifical law shows deep religious feeling and a respect for the solemnity of religious ceremony."⁵⁵

IV. CONCLUSIONS: COMMERCE, PURITY, DEATH AND ATONEMENT

Cicero's sensitive remarks illustrate that from a perspective which would have been known to Roman readers, the story of the Geresene demoniac would not seem unusual, bizarre or comic but instead describes scenes understandable from their own cultural and religious experiences. The survey of Roman practices which used swine in services of atoning sacrifice demonstrates that the swine are not unimportant elements of the story which can be eliminated without narrative loss ; neither does it indicate that the story is unsympathetic to the pigs or their Gentile owners.⁵⁶ Varro's comment that a large herd would not normally exceed 300 pigs suggests that Mark's figures may be exaggerated to demonstrate Jesus' superlative power over the demons, but it also shows that

⁵⁵ Other Roman sacrifices of pigs include the expiatory sacrifice of a pregnant sow at the time of an earthquake (*De div* 1.45.101) and the offering in December to Bonna Dea for the promotion of female fertility. For discussion of the latter see R.M. Ogilvie, *The Romans And Their Gods In The Age Of Augustus* (N.Y.:W.W. Norton, 1969) 97-98. Ogilvie also provides excellent summaries of the meaning and practice of Roman sacrifice and the significance of the Roman religious calendar.

Scullard (39) points out that pigs were also sacrificed if a festival day was desecrated by unlawful labor and that the wife of the *Rex Sacrorum* sacrificed a pig or a lamb to Juno in the *Regia* on the 7th or 9th day of each month before the *Ides* (43).

⁵⁶ So T.A. Burkill, "Concerning Mark. 5,7 And 5,18-20", *ST* 11(1957), 159; also Vann, 278.

from a Roman perspective the loss would have been considered to be economically disastrous. At the very least, the response of the community (5:17) is understated and unexpectedly polite since the perpetrator of the destruction is merely asked “to depart from the neighborhood”. As Fowler notes, domestic animals were valuable property⁵⁷, and were expected to be treated as such. In a city with a large necropolis, a Roman garrison, a prosperous commercial center⁵⁸ and an established religious base, huge numbers of pigs would have to be kept not only for the purposes of sacrifice but for food for the public and for troops billeted there. What is more, common knowledge about the large amount of food continually coming into a cemetery to honor the dead, as well as the fact that it was a regular practice in Roman sacrifice to burn only the most vital parts of an animal (the liver, heart, kidneys etc.) and to reserve the rest of the victim for the priests and worshippers to consume (1 Cor 9:13)⁵⁹, would enable Gentile readers to understand that a man, even a madman, could survive in such a setting.

Since Mark so clearly links the pericope with discipleship themes in vv 19 and 20 (the request of the man to be with Jesus is reminiscent of ἵνα ὁσιύ μετ' αὐτοῦ in 3:14) it is likely that he sees the story in light of 8:34 and 10:29-31: following Jesus is a costly business and there are those who will refuse to pay the price. Riches (4:19; 10:22-23), families and property (10:29-30), the world (8:35) and herds of pigs may cause potential believers, Gentiles or Jews, to ignore Jesus’ call. People are more important than pigs, and the gospel is certainly far more valuable than swine.

The Roman practice of sacrifice for the dead also indicates that community concern for the madman is not a fantastic element of the story either. Religious taboos and reverence for tradition in a

⁵⁷ Fowler, 179.

⁵⁸ Harding points out that during the *Pax Romana* commercial and agricultural development was considerable in the Decapolis (84).

⁵⁹ Scullard, 23. Compare Paul’s discussion of the propriety of eating meat sacrificed to pagan gods, 1 Cor 8:1-13; 9:1-15. For an analysis of Roman sacramental banquets see R. MacMullen, *Paganism In The Roman Empire* (New Haven and London: Yale University Press, 1981) 31-43.

necropolis would require that city leaders try and restrain a man who was desecrating a sacred area. Previous studies of the section of the gospel in which Mark 5:1-20 is found have often concentrated on Jewish purity issues.⁶⁰ Usually the story of the Geresene demoniac is understood to indicate that Jesus, by casting the taboo swine into the sea, has decontaminated an unclean Gentile area. But Mark indicates that from Jesus' perspective both sides of the lake are contaminated with their own brands of spiritless ritual.⁶¹ If the story of the woman with the issue of blood (5:24b-34) is primarily concerned with matters involving contamination by being near women who are having menstrual or other gynecological problems⁶², and if concerns about ceremonial and real defilement are the focus in Jesus' encounter with the Pharisees and scribes in 7:1-23, viewing 5:1-20 from the other side demonstrates that purity issues are involved from a Gentile perspective as well. If Jesus violates Jewish expectations and disregards respected purity regulations by visiting areas where pork is an important commodity, if he makes himself ritually unclean by being in the presence of a bleeding woman (Hisako Kinukawa refers to Jesus as a "boundary breaker" because he stands against the discriminatory practices of Jewish ritual purity codes⁶³) , if he challenges the whole notion of keeping utensils and body parts ceremonially clean, he also denigrates the long held Roman belief that one must purify a burial area with the sacrifice of swine. By encountering Jesus, both Jews and Gentiles are faced with a demand to reassess their religious stock. From either side he looks and sounds the same. They are left only with him, his power over evil, and his command to abandon Jewish and Gentile pasts and become disciples now. The proper response, in Mark's view, is not

⁶⁰ See the excellent discussion of purity issues from religious perspectives in Bruce J. Malina, *The New Testament World, Insights From Cultural Anthropology* (Atlanta:John Knox Press, 1981) 122-152.

⁶¹ For a discussion of Mark's challenge to purity concepts in 5:1-20 see LaHurd, *Biblical Theology Bulletin* 20 (1990) 158.

⁶² See Hisako Kinukawa, *Women And Jesus In Mark, A Japanese Feminist Perspective* (Maryknoll, NY: Orbis, 1994).

⁶³ See Kinukawa, 47.

to be scandalized by Jesus (6:4), to mock his ability to deal with the dead (5:35-43), to challenge the untraditional practices of his disciples (7:5) or ask him to get out of the neighborhood (5:17), but to allow oneself to be transformed by him, be freed from oppressive demons and religious practices, live a new life, and proclaim the gospel to friends and neighbors.

A final point may be made about the conclusion of the story in 5:17-20 and Mark's comment in v. 20 in particular where it is indicated that the healed man "preached" about his experience throughout the Decapolis. Here there is no secret about Jesus' identity or what he has done since his activities are a matter of public debate in the area. Throughout his gospel Mark indicates that Gentiles are a part of Jesus' concern from the beginning⁶⁴ and that 5:1-20 is not the first miracle which he performs for them (3:7-11), anymore than it is the last (7:24-30; 7:31-37). The key phrases in v. 19 concern what the Lord has done (*ὅσα ὁ κύριος σοι πεποίηκεν*) and how he has had mercy on him (*ἡλέησέν σε*). In v 20 he preaches what Jesus has accomplished (*καὶ ἤρξατο κηρύσσειν ἐν τῇ Δεκαπόλει ὅσα ἐποίησεν αὐτῷ ὁ Ἰησοῦς*, cf. 3:8 and 7:37).

Insights into the Roman imagery which stands behind the pericope make it possible to move away from fruitless attempts to unravel the so-called Messianic secret to a more substantial exploration of the significance of religious practices in Gentile mission. As the context of 5:1-20 indicates, Mark has sandwiched the story of the Geresene demoniac into a section of the gospel which is primarily concerned with the concept of death. In 4:35-41 the account of the storm at sea signifies that the disciples are so afraid that they wonder why Jesus does not care that they are about to perish (4:38).⁶⁵ In the double narrative which follows (5:21-

⁶⁴ Annen argues that the debate about the origin of Gentile mission was centered in the pre-Markan tradition (51, 185-190). Kato contends that Mark shows Jesus limiting mission to the pagans until after the crucifixion (44-63, 188-197).

⁶⁵ As Pesch observes, the sea is often a symbol of the abyss (*ER*, 365,367); also M. Lubetski, "New Light On Old Seas", *JQR* 57 (1977) 65-77; Malbon, *JBL* 103(1984) 376-377.

5:43), Jewish bystanders scornfully disdain Jesus' ability to raise the dead (5:35-43). As Mark McVann points out, 5:1-20 is an integral part of the Markan sea-cycle (4:35-5:43) which demonstrates Jesus' power over death no matter how it manifests itself. "This pattern of overcoming death and transforming life is repeated four times in the sea-cycle. Although each exposure of the theme is taken from a different angle, the focus is consistently on Jesus as the only one who can save. Jesus' power over the forces of death and the settings on and by the sea combine to unify the cycle not only topographically but structurally and thematically as well."⁶⁶ Death, the ultimate uncleanness [to Jews and Gentiles] is now banished from the tomb-dwelling demoniac and by being driven into the swine is itself destroyed in the waters of chaos and death which Jesus has already destroyed.⁶⁷

To a Roman reader, sacrificing swine for the dead was an act of piety which generated atoning power and guaranteed the deceased a smooth transition to the afterlife. From such a perspective Mk 5:1-20 might serve the same function as 11:12-19 does for the Jews. If the story of the cleansing of the Temple presents to the Jews the unimaginable prospect that the Temple, its economic basis (tables of the money-changers) and its sacrificial system (pigeons, cf. 15:38), is to be overthrown by Jesus through his crucifixion (15:29,30,38), so 5:1-20 suggests to the Gentile reader living in the Roman Empire that the revered and traditional sacrifices for atonement and preparation for the next life will also be replaced by Jesus' one atoning death. That Gentiles are amazed by Jesus' actions and claims (5:15,17,20) is no more surprising than his rejection by the Jews (5:35,42; 6:4-6; 7:6-8; 12:12-13,17). The church must prepare for the fact that some people will respond to the word and some will not (4:13-20). As the gospel is preached to all the nations (13:10) it may even take on different forms ($\delta\pi\alpha\gamma\epsilon$)

⁶⁶ Mark McVann, "Destroying Death: Jesus in Mark and Joseph in 'The Sin Eater'", in *The Daemonic Imagination* 124.

⁶⁷ McVann, 126.

Johnson, **Mark 5: 1-20 IBS** 20 April 1998

εἰς τὸν οἶκόν σου πρὸς τοὺς σοὺς, 5:19).⁶⁸ The basic message, however, remains the same: from now on atonement can only be achieved by Jesus' death on the cross and his resurrection from the dead (Rom 10:7-10; 1 Cor 2:2; Rom 1:16; 3:23-25, 29-30). Jesus, as the one true sacrifice to God, will indeed create a house of prayer for all cultures of the world (11:17) but the old systems must be cast out and nations and individuals alike must deny themselves and take up the cross (8:34).

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⁶⁸ In 5:18 the healed man wants to go with Jesus but he is denied. Cf. Paul's assertion that the gospel has different formats in different cultures, 1 Cor 9:12, 20-23.

Barr, *Gospels and Acts* IBS 20, April 1998
SIGNIFICANT SCALE CHANGES IN THE GOSPELS AND ACTS

Dr. George K. Barr

Abstract

Changes of scale within the texts of Matthew, Luke and Acts produce similar patterns which are different from those found in the Gospels according to Mark and John. The cause of these differences throws new light on the ways in which source material has been used in compiling these works. Scale levels also provide significant evidence regarding the Passion narratives.

Scale Changes

The most useful practical guide to scale level is the average length of sentences. Every author has his own range. In my own work, the average sentence length of a piece of writing varies between about 14 words and 23 words per sentence. Isocrates works on a grander scale; the average length of sentence varies between about 24 words in his earliest work and 54 words per sentence in his last work. Sentence length, however, provides only a general guide because there are also other variables involved. A high-scale work has comparatively long sentences; a low-scale work has comparatively short sentences. The range of each author is different but many authors' ranges overlap.

It not infrequently happens that batches of material written at different scale levels are found within one work. For example, Paul's epistles frequently show theological (high-scale) and ethical (low-scale) sections within one epistle. Short stories may have descriptive sections (high-scale) and also passages of conversation (low-scale). The late J.S. Stewart's sermons had low-scale passages in which he examined a human situation, followed by monumental, high-scale passages in which he looked at that situation in the light of the holiness of God. These monumental passages employ exceptionally long sentences. Paul, John (of the Revelation), John Ruskin and Thomas Carlyle all use exceptionally

long sentences in passages which have a high numinous content. Internal changes of scale can often be traced to changes of genre or of mood.

Detection of Scale Changes in Graphs

The "shape" of a piece of writing can be shown graphically by means of a **cumulative sum graph**. For the technically minded, this means plotting the cumulative sum of variations in sentence length against the sequence of sentence numbers (sentence 1, 2, 3 etc.). For the non-technically minded - where the graph goes up it signifies that the sentences at that point are longer than the average; where the graph goes down it means that the sentences at that point are shorter than the average. A rising graph therefore indicates a higher scale level; a falling graph indicates a lower scale level. The variations from sentence to sentence cause the trace to fluctuate giving a saw-tooth effect.

The **SuperQsum** was devised to eliminate the saw-tooth effect so that the sub-structure of the text might be more clearly seen. SuperQsums are plotted by substituting the cumulative sum values for sentence lengths and drawing a further cumulative sum graph using these values. This eliminates the jaggedness ("noise") in the graph. The form of the SuperQsum is quite different from that of the normal graph, but if an author like Paul shows recurring patterns in the normal graphs of his works, then the SuperQsums of these works will also show a recurring pattern. Both kinds of graph are shown in Fig. 1.

Comparing Cumulative Sum Graphs and SuperQsums in the Gospels and Acts

Fig. 1 shows the two kinds of graphs produced from the sentence length data taken from the texts of Matthew, Luke and Acts. The fine line is the cumulative sum graph and reflects the variations from sentence to sentence. The heavier line (the SuperQsum) gives a smooth curve reflecting the sub-structure. It may be noted that in each case the latter rises above the former trace. This is not the case in Fig. 2 in which the graphs derived from the Gospels of Mark and John are shown. In these gospels, the SuperQsum takes

the form of a low line falling more or less within the range of the ordinary cumulative sum graph.

This must be surprising, conditioned as we are to regarding the Synoptic Gospels as being similar to each other and different from John's Gospel. It is surprising to find Mark and John in the same category, differing from Matthew and Luke.

The reason for this is found by devising the mathematical model shown at the bottom of Fig. 2. In this model a random series of numbers is taken to represent the lengths of sentences - the numbers are 5,9,8,4,2,6,7. Two longer series are prepared, one by repeating each of these numbers five times and mixing them up randomly to give a series of 35 numbers. The second longer series is prepared by taking the numbers in batches of five - five 5s, five 9s, five 8s etc. The test graph in Fig. 2 shows that the series with a random mix of numbers produces a low trace very similar to the SuperQsums of Mark and John, while the series taking the numbers in batches produces a high trace similar to the SuperQsums of Matthew, Luke and Acts.

Let us now substitute the average sentence lengths of pericopes¹ for the numbers in the model. By analogy, where pericopes have been taken from source material and used at the scale level at which they are found, without recasting the material, then the resulting text may be expected to produce the kind of result found in the model which uses random numbers; it will therefore correspond to the kind of trace found in Mark and John. But where the material is recast in batches to a new overall scale level, then it will produce the kind of result obtained in the model which uses the numbers in batches; it will therefore correspond to the kind of trace found in Matthew, Luke and Acts.

¹ The term *pericope* is not used in its ecclesiastical sense, but to indicate a unit of text which is complete in itself and which may be abstracted from source material in assembling a new work.

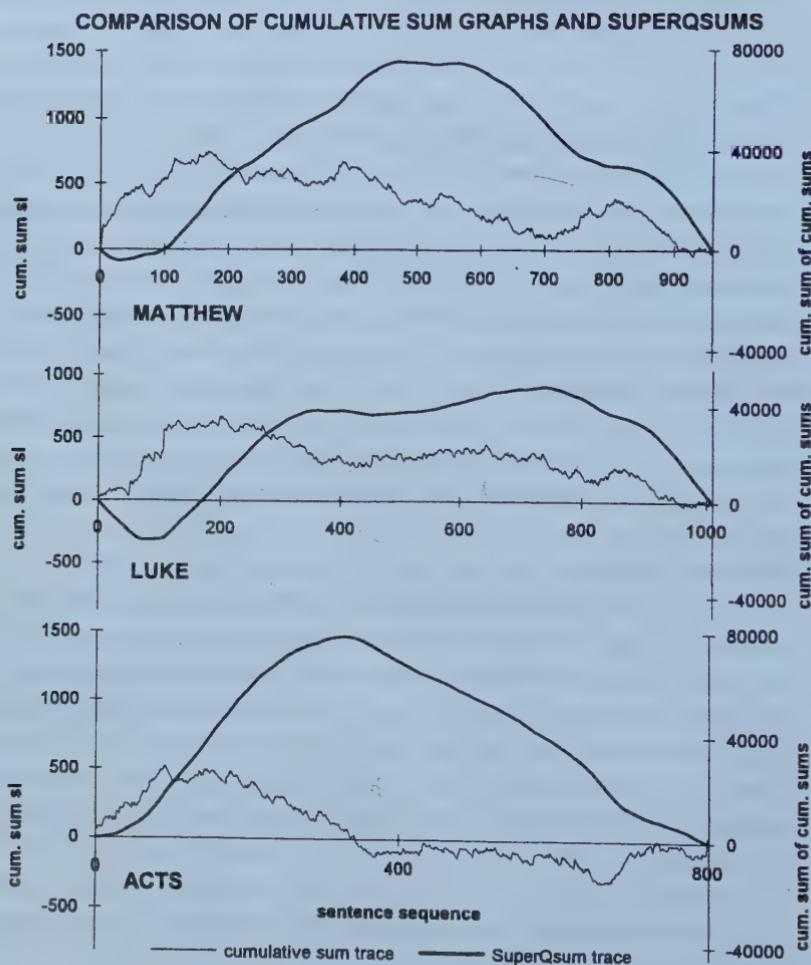
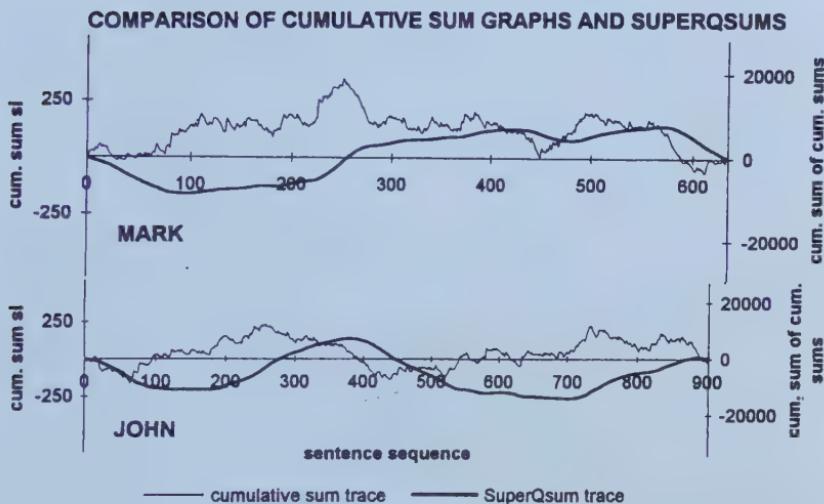


Fig. 1 The cumulative sum graphs show the fluctuations in length from sentence to sentence. The SuperQsum trace eliminates the "noise" and gives a smooth curve which reflects the substructure of the work. The SuperQsum is different in form from the cumulative sum graph, but if an author produces similar cumulative sum graphs in different works then the SuperQsums will also resemble each other. Note that these SuperQsum traces rise above the cumulative sum graphs when the scales are in the relationship shown above. Compare those in Fig. 2.



SQ test - Series 5,9,8,4,2,6,7 (x5) In SQR trace, numbers are taken in random order. In SQ trace numbers are taken in batches of five in the order shown above.

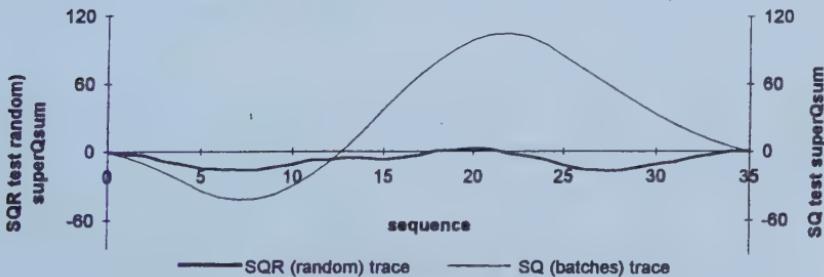


Fig. 2 The scales in these graphs of Mark and John are in the same relationship as those of Matthew, Luke and Acts in Fig. 1. The SuperQsum curves are low in comparison. The SQ test graph is a mathematical model which provides an explanation. When numbers are taken in random order they provide a low graph. When they are grouped in batches of the same number, they provide a high graph. This may be related to the scale patterns within the texts.

Scale Planes in Graphs - Matthew, Luke and Acts.

If the above argument is sound, then it may be expected that facets or planes will appear in the graphs corresponding to batches of pericopes which have been recast. These facets or planes will be disguised by the local saw-tooth pattern, but should be more discernible in Matthew, Luke and Acts than in Mark and John. It is important to note that such a scale plane should cover several pericopes (and not just one long pericope) and that the plane should be related to the content of a clearly defined section of the text. This is, in fact, the case.

Fig. 3 shows the underlying scale planes in Matthew's Gospel. Each facet or plane is related to a section of the text with clear boundaries. The Birth narratives (Sec. 1), the Sermon on the Mount (2), some parable sections (4, 6 and 9) and the section containing warnings (11) are higher than average in scale (indicated by a rising graph). The sections on Jesus' ministry and teaching (3,5,7 and 10) are lower than average in scale (indicated by a falling graph). The Passion narrative is conceived at the lowest scale level. These levels are reflected in the average sentence lengths given in the bottom row of numbers. The low scale of the Beatitudes forms a small hiccup in section 2 relating to the Sermon on the Mount.

Fig. 4 shows the scale planes in Luke's Gospel. These are less complex than those found in Matthew and are clearly related to the content of the text. The opening section from Birth to Baptism (1) and the little section on the End Time (8) are above average in terms of scale. The sections on ministry and teaching (3,5 and 6) vary in scale. This may not necessarily reflect differences in genre but may reflect different batches of material and different sessions in writing out the recast material. Again, the section on the Passion (9) is lowest in scale.

Fig. 5 shows the scale planes in Acts - the clearest of all. In the first section on the Early Church, the text is suffused with a sense of the numinous and this results in an element of monumentality with sentences which are much longer than the average for the whole work. That section is interrupted by a small

pericope which is clearly conceived at a different scale level; it is the story of Ananias and Sapphira. This does not necessarily indicate that the story has been inserted at a later date. It may be that the pericope has simply been included at the scale level at which it was found in the source material, without recasting. There are clear differences between the sections on Early Evangelism and Paul's Journeys (3 and 4). Again these may reflect sessions in the compilation of the work as there seems to be little difference in terms of genre. The sections relating to Jerusalem and Caesarea do not necessarily indicate that the text was written in these places, but rather that these represent batches of material or sessions in the compilation. The high scale of the section relating to Caesarea is due largely to the reconstruction of the speeches of Paul. It may be noted in passing that of all the speeches attributed to Paul in Acts, only that addressed to the Ephesian elders has characteristics which might be identified as Pauline. The speech is too short to be certain, and it is incomplete as it merges into unrecorded prayer, but the characteristics could possibly be Pauline. This proposal may be considered romantic and should not be pressed unduly, but Luke appears to have been present on that occasion and he may possibly have possessed tachographic skills.

THE GOSPEL ACCORDING TO MATTHEW

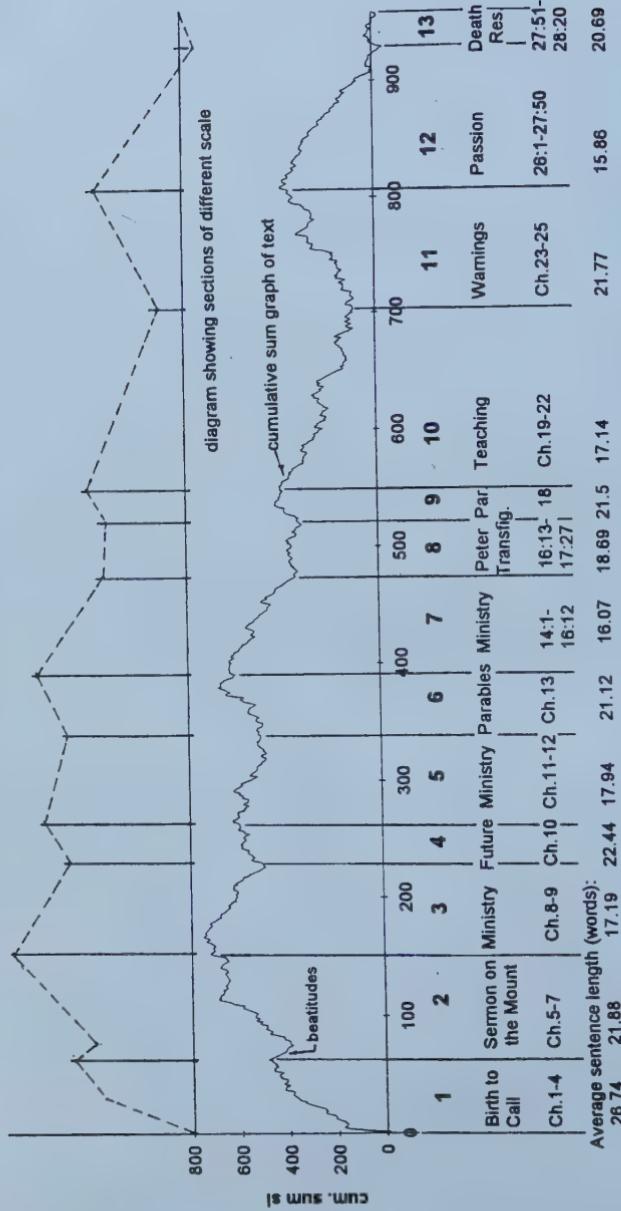


Fig. 3 The scale changes in Matthew for the most part match the chapter layout. Sections on ministry are generally at the low end of the scale range, but the birth narratives, the Sermon on the Mount and sections with eschatological overtones are at the high end. The Passion narrative is at the lowest scale level.

THE GOSPEL ACCORDING TO LUKE

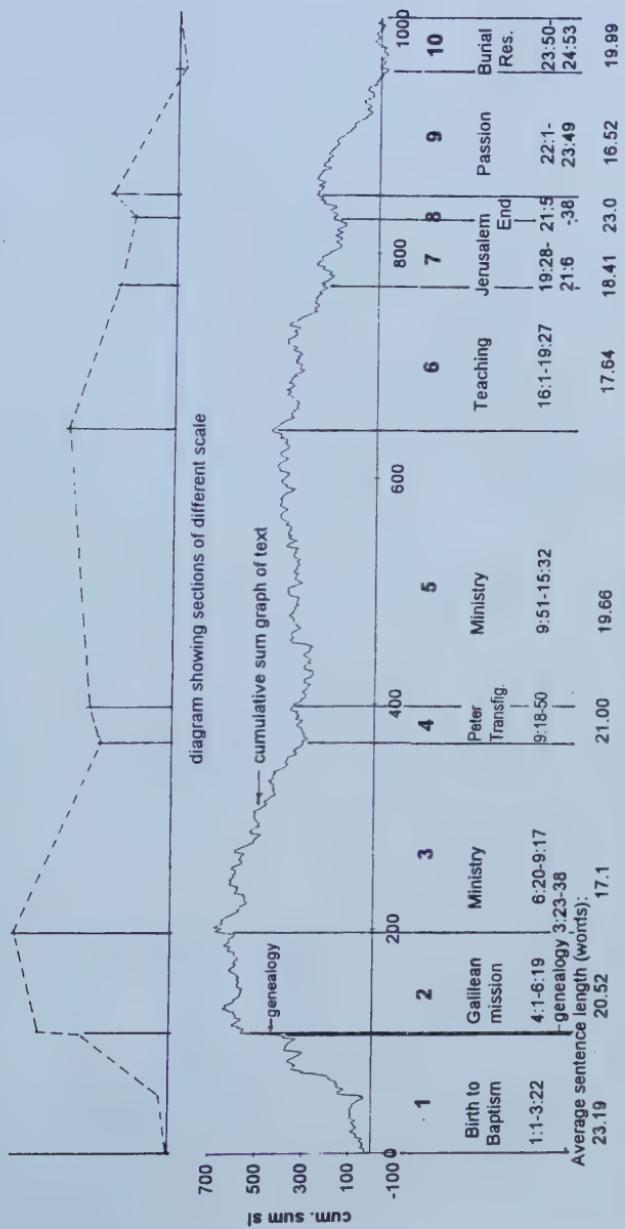


Fig. 4 In Luke's Gospel the birth/baptism narratives and the passage on the end time are at the highest scale level. Different sections on ministry and teaching vary, but lie in the middle range. The Passion narrative is written at the lowest scale level.

THE ACTS OF THE APOSTLES

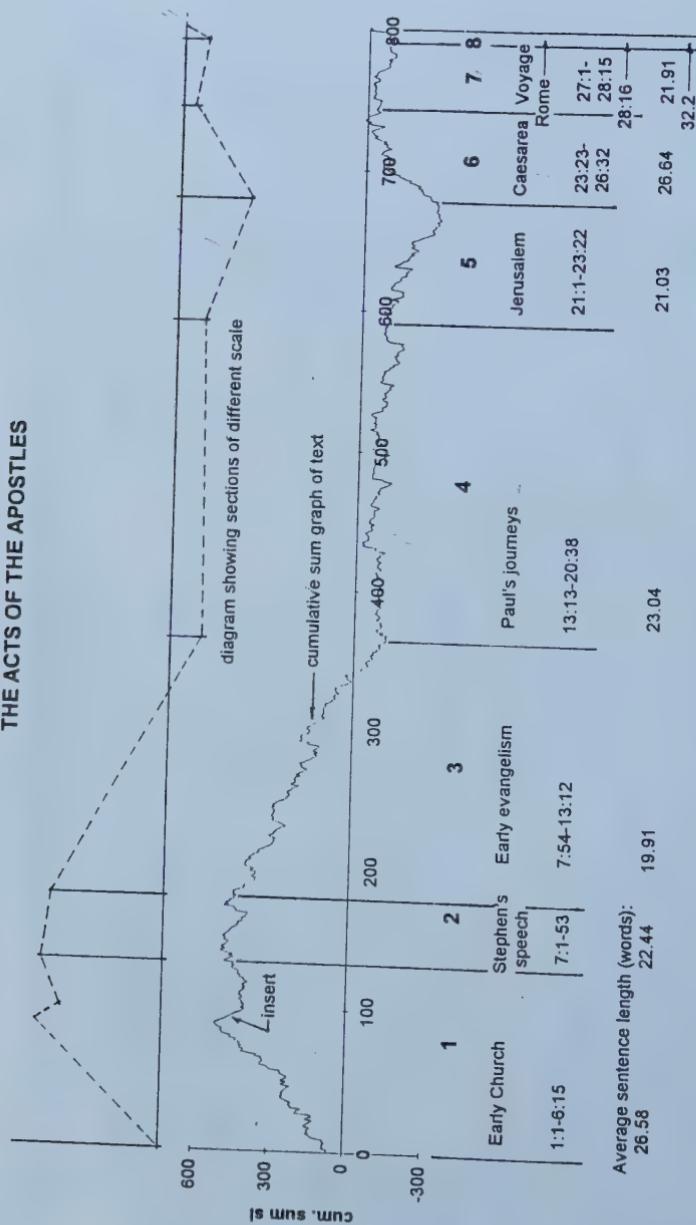


Fig. 5 Each of these sections in Acts is largely homogeneous in terms of scale and each section of the graph is clearly related to the content of the text. The scale planes are more clearly defined than in the gospels. The insert refers to the story of Ananias and Sapphira.

Series of Pericopes in the Gospels of Mark and John

In Mark and John, which in contrast to Matthew, Luke and Acts produce the low type of SuperQsum, there is a marked absence of scale planes which can be related to specific sections of text. Instead, there is greater variety in the scale levels from pericope to pericope. Fig. 6 shows the graph of Mark's Gospel. The strong feature at sentence 225-280 which looks important, is in fact caused by two long pericopes, one high-scale and one low-scale. The first represents the encounter with the Pharisees beginning at 7:1; the second, beginning at 8:1, represents the story of the Feeding of the Four Thousand and subsequent events. These are unimportant regarding scale planes. The passage from 12:18 to 13:37 has eschatological overtones which result in a higher scale level; this may be a genuine scale plane. The treatment of the first part of the passage on the Passion is not very different from other passages of narrative, but from Peter's denial at 14:66 the scale is suddenly reduced as in the other gospels.

Fig. 7 shows the graph of John's Gospel. An examination of the pericopes in detail does not reveal any batch of material which might be related to a scale plane, except the Passion narrative from 18:1 to 19:30 which again is at a low scale level.

The Compilation of the Gospels of Matthew and Luke and the Book of Acts

The graphs of the Gospels of Matthew and Luke, and also that of the Acts, show marked scale planes, indicating that pericopes have been selected from source material and arranged in batches. These batches have then been recast to some degree, giving an overall scale level to each batch. It is wise to say "to some degree" because it is not a black and white choice - to recast completely or not at all. Nevertheless, clear distinctions may be seen between the different works. The scale planes are particularly clear in Acts. We may therefore imagine Matthew and Luke with a variety of written sources before them and arranging the material in batches, possibly adding their own memories of some events. Thereafter each batch was written out with some recasting of the material so

THE GOSPEL ACCORDING TO MARK

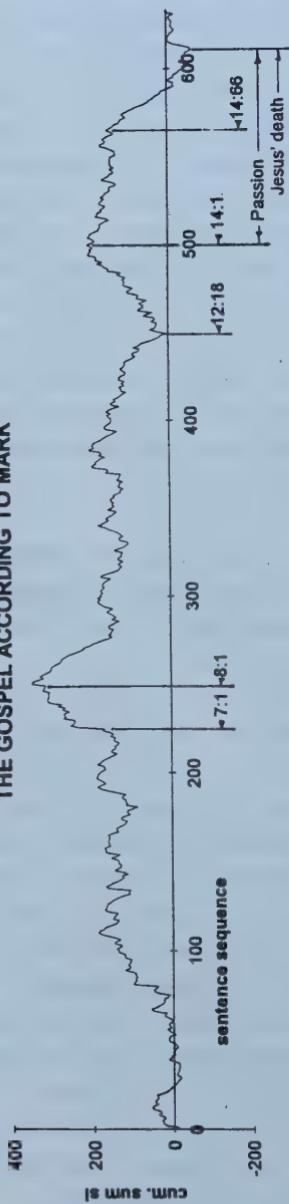


Fig. 6 Fluctuations in the trace up to 12:18 are due to individual pericopes at different scale levels. The feature at sentences no. 22:5-28:0 is caused by two long pericopes beginning at 7:1 (higher scale) and 8:1 (lower scale). From 12:18 to 13:37 a change of mood and eschatological content result in a higher scale level. The treatment of the first part of the Passion narrative is similar to that of other narrative sections, but from Peter's denial at 14:66 the scale is suddenly reduced as in the other Gospels.

THE GOSPEL ACCORDING TO JOHN



Fig. 7 In the graph of John's Gospel there are no substantial scale planes related to the text except the Passion narrative from 18:1-19:30 which is a low scale passage.

Barr, *Gospels and Acts* IBS 20, April 1998
that the whole batch was fairly homogeneous in terms of scale.
Such treatment would produce a scale plane for each batch.

The Compilation of the Gospels of Mark and John

If there is anything in the tradition that Mark recorded the substance of Peter's preaching, then we may imagine him making notes on membranae as Peter preached. Tachygraphic skills (as described by Cicero a generation or two earlier) were available, and verbatim recording was possible. In such circumstances, the scale level of these recorded notes would be that of Peter's speech on that particular day. To these notes may have been added other source material and Mark's own memories. In compiling his gospel, it would appear that he did not recast the material in batches, but used the pericopes more or less as he found them and at their original scale level. Only the eschatological material in 12:18 to 13:37 produces a scale plane indicating a higher scale level. The Passion narrative is not so consistently low-scale as in the other gospels. We may therefore imagine Mark compiling his gospel using source material more or less at the scale level and in the form in which it came to his hand.

John's Gospel seems to present an anomaly. In analysing the content of John's Gospel one might conclude that of all the gospels it shows the greatest degree of literary construction. The material is organised with purpose. Yet it shows a randomness in the scale levels of pericopes which produces the low type of SuperQsum and which suggests that source material has been used without recasting it in batches.

A possible solution may lie in the hypothesis that the written sources available to John had long been absorbed into his teaching and preaching material. I have noticed that when I introduce an old and familiar illustration into a sermon, the illustration may be produced with exactly the same words and phraseology used on previous occasions. In other words, familiar material may be stored in the brain's memory bank at a particular scale level and may be introduced into a new context without changing that scale level. Indeed, scissors and paste methods using

material stored on computer produce the same effect. This may lead to a certain unevenness in the text of a sermon.

Here we may note a difference between Paul and John. Whereas Paul used argument, John tended to use stories. Paul argued theologically and sometimes employed metaphor, for example in explaining the meaning of atonement. It does not appear to have been his habit to tell stories other than his own personal history. Occasionally, however, he passed on elements of oral tradition in the form in which they had been handed down to him, for example regarding the tradition of the Lord's Supper. John, on the other hand, seems to have been mainly a story teller, although his gospel is not without distinctive theological content. In a society which is largely nonliterate, stories take the place of written historical records in establishing and maintaining the identity of the people. Narrators in ancient times shared the characteristics of story tellers found more recently in the Gaelic speaking highlands and islands of western Scotland and in western Ireland. In the hands of such a narrator, oral tradition may be recast to some degree but then becomes frozen in the narrator's own form by dint of frequent repetition. It is stored in his memory bank at a particular scale level. Comparison may also be made between the Synoptic accounts and John's gospel. The stories in the Synoptics represent a primitive stage of the oral tradition; those in John's gospel represent a later stage, when the content of the story is recast to suit the narrator's purpose.

Behind John's gospel there may lie a long history of teaching and preaching and a prodigious memory bank. When John was persuaded to record the gospel story, he drew on this material, choosing pericope after pericope and reproducing them substantially at the scale level at which they were retained in his memory. The framework of his gospel is therefore a new creation, but it is given flesh by using pericopes retained in his memory at many different scale levels. The result is a work which produces a low SuperQsum like Mark's, and quite unlike those of the Gospels of Matthew and Luke and the Acts. Like the other gospels, however, John's narrative of the Passion from 18:1 to 19:30 is low

in scale; this may provide a genuine scale plane dependent on the original source material.

The Passion Narratives

It is surprising that the Passion narratives should be framed at a low scale level as they describe the turning point of history. When other writers look back to the turning points of history they tend to do it in monumental terms, using very long sentences. When Matthew and Luke looked back to the Birth of Jesus, they described these events in passages set at the highest scale levels found in their gospels. When Luke recalled the story of the Early Church and Pentecost in the first six chapters of Acts, his record is suffused with a sense of the numinous and these chapters have the highest scale levels in Acts. Yet the Passion narratives are consistently low-scale, even domestic in scale. The eye witnesses behind these sources were unaware that they were standing at a turning point in history.

In the Birth narratives and in the story of the Early Church recorded in Acts, the authors look back over a period, possibly of some decades, during which tradition has grown and their record has developed a degree of monumentality, that is, it is recorded at a comparatively high scale level. The numinous awareness and the sense of wonder, however, are located in the mind of the author, not necessarily in the minds of those who are recorded as witnessing the events. The eye witnesses of the Passion of Christ were unaware that history was at a turning of the ways; they knew only grief and shock, and this is reflected in the low-scale, domestic nature of the record. The fact that the Passion narratives are utterly devoid of any monumentality is a sign that they do indeed represent eye witness accounts, written close to the events they describe with little understanding of the significance of these events. At a later date these eye witness accounts were to be incorporated in the gospels at the scale level at which they were first recorded. Monumentality would only appear when Paul looked back and with hindsight expounded the meaning of the Passion of Christ in the theological sections of his epistles. There the text would show the highest scale levels in the New Testament.

Conclusion

The comparison of cumulative sum graphs and SuperQsums shows the startling differences between the group comprising the Gospels of Matthew and Luke and the Book of Acts, and the pair comprising the Gospels of Mark and John. The mathematical model shows that these differences are due to the different ways in which material has been assembled and used. Matthew and Luke recast their material in batches, resulting in a fair measure of homogeneity in terms of scale within each batch. Mark used his source material more or less at the scale levels at which it came to his hand, and therefore his gospel produces little in the way of significant scale planes. John may have drawn his material from memory, rather than from written sources, and employs the scale levels at which the material was previously used.

The texts of the Passion narratives bear the hall marks of eye witness accounts, being utterly devoid of monumental development, and indicate the respect which the gospel writers had for this unique, primitive material.

Finally, the comparison of cumulative sum graphs and SuperQsums in the other New Testament works may be noted. The thirteen Pauline epistles all contain prime patterns which have strong contrasts between high scale and low scale sections; this provides distinctive wide band SuperQsums. Likewise, Hebrews, 1st Peter (from 2:1 where the author resumed writing) and 2nd Peter show another kind of prime pattern with a strong high-scale central inclusion which is also reflected in the SuperQsums. James and 1st John include series of topics dealt with at different scale levels and therefore show some scale planes. Revelation provides an unusual and irregular rhythm of monumental, high-scale passages followed by low-scale passages which results in a wide band SuperQsum. None of these epistles, however, are compiled using pericopes from other sources. 2nd and 3rd John and Jude are too short to provide significant patterns.

Paul mentions "the parchments" (2 Tim. 4:13) which suggests that he made notes which may have been used in the preparation of his epistles. The form of such material, however, can

Barr, **Gospels and Acts** IBS 20, April 1998

hardly have survived the process of dictation which has produced such exceptionally strong forms in his epistles. Only the Gospels and Acts are compiled using pericopes from other sources, and the distinction drawn between the group comprising the gospels of Matthew and Luke and the book of Acts and the pair comprising the gospels of Mark and John appears to be a valid one.

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MacAdam, Book Review Article IBS 20, April 1998

F. Richard Stephenson, *Historical Eclipses and Earth's Rotation* (Cambridge, U.K., Cambridge University Press, 1997). Pp. xvi + 557. Maps, charts, diagrams, and other illustrations. \$US 160.00. ISBN 0-521-46194-4

Stephenson sets out his intentions clearly and succinctly in the first paragraph:

The main purpose of this book is to investigate in detail long-term variations in the length of the day, or equivalently, changes in the Earth's rate of rotation, using pre-telescopic observations of eclipses. Such variations are mainly produced by lunar and solar tides, but non-tidal mechanisms are also significant. Despite its historical bias, this subject has become an important topic in modern geophysics. (p.1).

For the next 500 pages the author, who currently teaches at the University of Durham (UK), sets out to explore that stated goal. This he does throughout three introductory chapters: 1) "Variations in the length of the day: a historical perspective;" 2) "Tidal friction and the ephemerides of the Sun and Moon;" and 3) "Pre-telescopic eclipse observations and their analysis," which is a particularly engaging discussion.

Some historians and/or archaeologists and/or biblical scholars may be baffled (or even intimidated) by the strongly "scientific" presentation of much of the preliminary material. Every discipline is idiosyncratic in how it communicates, inevitable utilizing its own terminology that too often becomes jargon. The helpful list of "Principle Symbols" (pp.xv-xvi) is unfortunately incomplete: JDN (Julian day number) and JED (Julian ephemeris date) are not noted. Each appears in the index, but with no reference to the respective acronym. A complete list of abbreviations would be appreciated.

That said, historians, archaeologists, and biblical scholars may turn with considerable profit to several essays which stand out for their clarity and concise treatment of practical topics. One is "The Julian and Gregorian calendars" (pp. 29-32), towards the end of which is the best one-paragraph explanation I've ever read of

those famous "ten missing days" from many European calendars (in order to effect the transition from Julian to Gregorian reckoning):

Ten days in AD 1582 were omitted from calendar reckoning. The date 1582 Oct 4 (a Thursday), the last day of the Julian system, was immediately followed by 1582 Oct 15 (a Friday), the first day of the Gregorian scheme. In consequence, the date of the vernal equinox was restored to Mar 21, as it has been at the time of the Council of Nicea in AD 325 (p.31).

Another splendid short essay is that on "Historical eclipses." After culling through the available sources, Stephenson finds that there are 'a remarkable series of more than 300 useful observations of both solar and lunar eclipses, extending from about 700 B.C. to the telescopic era [i.e. to the 17th century]' (p. 61). For reasons which I cannot fathom, the figure of "300 useful observations" has become "more than 400 timed and untimed observations" on p. 501.

That follows on discussions of what causes eclipses (solar and lunar eclipses demonstrate mutually distinct features), which leads to some fundamentally important considerations of which historical eclipse observations are, and are not, of value in the investigation of the Earth's rotational clock error.

For the readers of *Irish Biblical Studies*, Stephenson's essay on "Source of data" (pp.58-61) will be especially important, and I make no apologies for extended excerpts. He identifies only four ancient and medieval cultures which have left us a "data-base" of celestial information which might be helpful in determining changes in the length of an Earth day, i.e. fluctuations in the rotation of our home planet.

These are the Babylonian, the Chinese, the European and the Arab/Islamic. The chronological parameters of those four he gives as 700 B.C. and A.D. 1600. Readers of this review who find it odd that only four are accepted will appreciate my own surprise and that of Stephenson himself: 'Somewhat surprisingly there do not appear to be any useful records from ancient Egypt (apart from

the Greek [i.e. Hellenistic and later] city of Alexandria), India or Central America' (p. 58).

The reason appears to be lack of primary sources, especially for the *observations* of lunar or solar eclipses. Of Mesoamerican cultures, the Mayans were the most compulsive about keeping track of the cosmos, but even for a civilization keenly concerned with eclipse predictions, 'no actual observations are known to survive. Maybe mayan codices (possibly those containing valuable historical astronomical records) were destroyed by the conquistadors in A.D. 1540' (p.59).

For biblical historians especially, the recording of eclipses in Babylonian (later "Chaldean" = neo-Babylonian and neo-Assyrian), Greek and Roman sources are of negligible importance simply because the Old and New Testaments (including the Apocrypha, Pseudepigrapha and other inter- or extra-testamental literature) contain very few references to what might be actual historical eclipses. But some of those are central to biblical chronology, perhaps more so for the New than the Old Testament. Unfortunately, most are vague.

Even when the reference is specific, it is often difficult to calculate an exact date. Such is the case of the lunar eclipse that occurred (according to Josephus' *Antiquities*) just before the death of Herod the Great. Thirty-two years ago the traditional date of 4 B.C. was challenged by Floyd Filmer in *JTS* 17 (1966) 283-298, and quickly rebutted by T.D. Barnes in *JTS* 19 (1968) 204-209.

Luke 23:44-5 is the only account of the crucifixion of Jesus to mention (in some, but not all, MSS) a solar eclipse (*tou heliou eklipontos*). Since a solar eclipse at the onset of Passover is not possible, it appears that Luke has transposed the known total solar eclipse of 24 November A.D. 29 to the time of Jesus' execution. But unfortunately that doesn't solve the problem of the exact date for the death of Jesus, even if it helps us understand the rationale behind that evangelist's theology of the passion.

But for those who work with written records contemporary with, and relevant to the context of, biblical history, Stephenson's book will prove a useful companion. Chapters 4-10 are particularly apt, examining in some detail what is known about

Babylonian/Assyrian records of eclipses, Chinese and other East Asian records of solar and lunar eclipses, and concluding with an investigation of records of eclipses in ancient European history (that is, Greek and Roman).

One may note Stephenson's emphasis on the reason why Chinese eclipse records are so important in the opening statement of his Introduction to Chapter 8: 'More solar eclipses are recorded in the history of China than in the annals of any other civilisation.'

Throughout those six chapters are a number of short studies or essays from which students of the Old Testament or New Testament will benefit. Worthy of mention are the following: "The Babylonian calendar" and "Assyrian records of solar and lunar eclipses" (both in Chapter 4); and "A possible allusion to a total solar eclipse in the Babylonian *Religious Chronicle*" (chapter 5). Without hesitation I would suggest that all of chapter 8 (Chinese and East Asian eclipses) and all of chapter 10 (Ancient Europe) be read. Chapters 6, 7 and 9 are for a more specialised audience, but worth the effort if one is made.

Chapters 11-13 chronicle the records of eclipses from medieval Europe (the period, for Stephenson, between classical antiquity and the end of the sixteenth century). Chapters 12 and 13 are reserved for a discussion of the eclipses recorded in medieval Arab sources, and the records of eclipse observation by known Arab astronomers of the middle ages. The final chapter returns the reader to the main theme of the book: to determine changes in the length of day during the historical period under investigation (700 B.C. - A.D. 1600).

While the variation in Earth's rotation is understandably less of central interest to historians and biblical scholars, it will be of more than passing importance to prehistorians, anthropologists, archaeologists and palaeontologists. The fossil record indicates that the Earth's rotation has been gradually decreasing in the 4-5 billion years since it was first formed, perhaps by as much as 35 revolutions per year (from a year of 400 days to our present 365).

Stephenson shows how that progressive slowing can be measured over the brief span of the past 2,300 years, with all the attendant resources of modern mathematics, physics and

astronomical knowledge we have at hand since the beginning of the Enlightenment. What that will enable us to do more accurately is to plot the timing of known and unknown solar and lunar eclipses with greater accuracy, and in so doing allow us to determine with a greater and greater precision the chronology of the ancient and medieval worlds. That is no mean feat, and he is to be commended for this work of careful synthesis.

Historical Eclipses and Earth's Rotation concludes with this:

The study of Earth's past rotation is just one of several modern scientific disciplines in which ancient and medieval astronomical observations play a major role. It is particularly satisfying that observations from a wide variety of early cultures made [by] using different techniques can be integrated into a viable unity (p.517).

Following that are two appendices (timed data; untimed data), ample bibliography, and four indices: Places of Observation, Records of Eclipses, plus a Name Index and a Subject Index.

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